SMILAUER, Adolf, inz. dr.; DYOMOVA, Jirina, inz.

Contribution to the optimalization of operational planning.
Podn org 19 no.4:159-163 Ap '65.

1. Research Institute of Mechanical Engineering and Economics, Prague.

SMILAUER, Jan

An atmospheric noise receiver for the 5 kHz band.
Studia geophys 7 no.1:74-78 '63.

1. Geophysical Institute, Czechoslovak Academy of Sciences, Praha 4 - Sporilov, Bocni II.

L 3019-66 EWT(1)/FCC/EWA(h) GW

ACCESSION NR: AP5026875 CZ/0023/65/009/001/0061/0067 20 B

AUTHOR: Smilauer, Jan

TITLE: Calculation of ionospheric N(h) profiles from vertical sounding data of the Pruhonice Observatory

SOURCE: Studia geophysica et geodaetica, v.9, mno. 1, 1965, 61-67

TOPIC TAGS: F layer, ionospheric electron density, atmospheric sounding

ABSTRACT: The application is discussed of the method of calculating N(h) profiles for the purpose of determining the total content of electron concentration up to the height of the maximum of the F2 layer. A brief review is given of the transformations employed to permit the use of electronic computers. A detailed explanation is given of the selection of the model of the magnetic field, formed by four dipoles. Finally, the limitations of the method are evaluated, and a practical example of its application is given. Orig. art. has 12 formulas and 1 graph.

ASSOCIATION: Geophysical Institute, Czechosl. Acad. Sci., Prague

SUBMITTED: 16Jun64 ENCL: 00 SUB CODE: ES

NO REF SOV: 001 OTHER: 003 JPRS

Card 1/1

L 36173-66
ACC NR: AT6016649 SOURCE CODE: CZ/2512/64/012/000/0449/0461

27
B+1

AUTHOR: Smilauer, Jan

ORG: Geophysical Institute, Czechosl. Acad. Sci., Prague

TITLE: Cosmic noise-absorption meter in the 27.6-Mc band

SOURCE: Ceskoslovenska akademie ved. Geofysikalni ustav. Geofysikalni sbornik, v. 12, 1964. Prague, 1965. Prace, no. 196-214, 449-461

TOPIC TAGS: electromagnetic wave absorption, opacity meter, ionospheric absorption, noise absorption, cosmic noise

ABSTRACT: A review of the method of measuring electromagnetic-wave absorption in the ionosphere is presented, and the advantages and disadvantages of the method and the required equipment are cited. The cosmic noise-level meter, called the "riometer"—relative ionospheric opacity meter—designed at the Geophysical Institute of the Czechoslovak Academy of Sciences is described; its technical parameters are given.

Card 1/2

L 36173-66

ACC NR: AT6016649

and the important circuit diagrams are shown in the original article. In conclusion, sample registration is given, and possible ways of evaluation are suggested. Orig. art. has: 5 figures and 9 formulas. [KS]
[Based on author's abstract.]

SUB CODE: 20/ SUBM DATE: 28Feb64/ ORIG REF: 002/ OTH REF: 005/

SOV REF: 002/

Card 2/2 mcp

NYSENKO, Nikolay Trofimovich; SMILDIN, P.M., red.; SARMATSKAYA, G.I., red.izd-va; KAZANSKAYA, L.I., tekhn. red.

[Wood plastics; technology, properties and use] Drevesnye plastmassy; tekhnologiia, svoistva i primenenie. Moskva, Izd-vo "Lesnaia promyshlennost'," 1964. 105 p. (MIRA 17:3)

SMILEK, Pavel

Methods of operational control of the molecular weight of fluoroplasts. Chem prum 13 no.9:498-501 S '63.

1. Vyzkumny ustav gumarenske a plastikarske technologie, Gottwaldov.

L 31473-66 EWP(v)/EWP(j)/EWP(k)/EWP(h)/EWP(l) IJP(c) RM

ACC NR: AP6023170 SOURCE CODE: CZ/0008/65/000/011/1365/1369

AUTHOR: Homolka, Karel; Smilek, Pavel

ORG: Research Institute for Rubber and Plastics Technology, Gottwaldov (Vyzkumny ustav gumarenske a plastikarske technologie)

TITLE: Automatic apparatus for differential thermal analysis of organic compounds

SOURCE: Chemicke listy, no. 11, 1965, 1365-1369

TOPIC TAGS: thermal analysis, organic chemistry

ABSTRACT: The authors describe an apparatus which they designed; it is used to conduct differential thermal analysis at operating temperatures from 20°C to 500°C. The components of the apparatus are of Czechoslovak manufacture. The recorded temperature is accurate within 0.3°C; the instrument is suitable also for the maintaining of required temperatures. The inaccuracy of the reaching of certain temperatures in a given time was within 10%. Orig. art. has: 9 figures. [JPRS]

SUB CODE: 07, 20 / SUBM DATE: 07Sep64 / ORIG REF: 001

Card 1/1 mc

SMILENOV, B.

SMILENOV, B. Improving the measuring in the repairs of motorsl p. 24
Vol. 7. no. 12. Dec. 1956. MASHINIZIRANO ZEMEDELIE. Sofiia, Bulgaria

SOURCE: European Accessions List (EEAL) Vol. 6, No. 4--April 1957

SMILEVSKI, B.

SADIKARI[illegible], A., dr.; SMILEVSKI, B., dr; TADZER, I.S., doc.

Tuberculous leukemoid syndrome. Tuberkuloza, Beogr. 6 no.1:3-7 Jan-Feb 54.

1. Patofiziloski institut, Medicinski fakultet - Skoplje.

(TUBERCULOSIS, blood in
*leukemoid reaction)
(LEUKOCYTES
*leukemoid reaction in tuberc.)

SMILEVSKI, S.

SMILEVSKI, S. Livestock exhibitions and the work of the commission for evaluting cattle. P. 31

Vol. 7, no. 1, Jan. 1955
SOCIJALISTICKO ZEMJODELSTVO,
AGRICULTURE
Macedonia

SO: MONTHLY LIST OF EAST EUROPEAN ACESSIONS, (EEAL), VOL, 4, no. 9
Sept.1955

L 1118-66 EWT(l)/EWT(m)/ETC/EWG(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) RDW/JD/GG/GS

ACCESSION NR: AT5020482 UR/0000/64/000/000/0362/0371

AUTHORS: Vishchakas, Yu. K. ; Smilga, A. A.

TITLE: Contact resistance of cadmium selenide and an electrode

SOURCE: Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po fizike poluprovodnikov (poverkhnostnyye i kontaktnyye yavleniya). Tomsk. 1962. Poverkhnostnyye i kontaktnyye yavleniya v poluprovodnikakh (Surface and contact phenomena in semiconductors). Tomsk, Izd-vo Tomskogo univ., 1964, 362-371

TOPIC TAGS: cadmium selenide, contact resistance, photoconductivity, silver, gold, aluminum, indium, gallium, single crystal

ABSTRACT: Contact resistance between an electrode and CdSe and the methods of obtaining an ohmic contact were investigated in the kinetic study of the photoconductivity of CdSe. Preparation of polycrystalline films of CdSe and application of electrodes have been described by Yu. K. Vishchakas, A. A. Smigla, P. P. Brazdzhyunas (Uchenyye zapiski Vil'nyusskogo gosudarstvennogo universiteta, 33, 139, 1960) and also by P. P. Brazdzhyunas and Yu. K. Vishchakas (Trudy AN Lit. SSR, seriya B4, 21, 1956). One portion of polycrystalline films underwent

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ACCESSION NR: AT5020482

thermal treatment. Ag, Au, Al, In, and Ga electrodes were applied by evaporation in vacuum. Irradiation of the specimens with electrons or ions was conducted in a gas-discharge tube fed by a high voltage rectifier. By using a proper diaphragm it was possible to irradiate either the total surface of the semiconductor or only the subelectrode region. The contact resistance of the specimens was determined by the ratio $\gamma = \frac{R_0}{R_3}$, where R_0 is electrical resistance measured by the usual method, and R_3 is electrical resistance measured by the double-sounding method. Au, Ag, and Al electrodes and the film form a stable, time-independent contact resistance, which constituted about 60% of the resistance of the film for the contact Au-CdSe, 20% for Al-CdSe, and 10% for Ag-CdSe. Ga and In electrodes plus CdSe formed a time-dependent contact resistance constituting about 30% of the film resistance for In-CdSe and Ga-CdSe. To obtain an ohmic contact of CdSe single crystal and an electrode, the subelectrode region was bombarded with a glow discharge and was covered with an evaporative film of In and then with an In amalgam (95% In + 5% Hg). The observed phenomenon of the ohmic contact was previously explained by the model of F. A. Kroger, G. Diemer, and H. A. Klasens (Phys. Rev. 103, 279, 1956). Orig. art. has: 3 tables and 4 figures.

L 1118-65

ACCESSION NR: AT5020482

3

ASSOCIATION: Katedra fiziki poluprovodnikov, Vil'nyusskiy gosuniversitet im. Kapsukasa (Department of Semiconductor Physics, Vilnius State University)

SUBMITTED: 06Oct64 ENCL: 00 SUB CODE: EC

NO REF SOV: 009 OTHER: 007

Card 3/3

L 22987-66 EWT(l)/EWT(m)/ETC(f)/EWP(t)/EWG(m) IJP(c) RDW/JD/AT

ACC NR: AT6012825 SOURCE CODE: UR/2910/65/005/001/0154/0156

AUTHOR: Smilga, A. A.--Smilga, A.; Vishchakas, Yu. K.--Viscakas, J.

ORG: Vilnius State University im. V. Kapsukas (Vil'nyusskiy Gosudarstvennyy universitet)

TITLE: High-voltage photovoltaic effect in cadmium selenide polycrystalline films

SOURCE: AN LitSSR. Litovskiy fizicheskiy sbornik, v. 5, no. 1, 1965, 154-156

TOPIC TAGS: photoelectric effect, photo emf, cadmium selenide

ABSTRACT: Larger-than-gap photovoltages reaching more than 20 v per 1 cm of sample length have been discovered in cadmium selenide thin films. The samples were prepared by vacuum evaporation, with the temperature of the glass substrate varied between +20 to 250C, and the angle of deposition from 0° to 75°. The value of the photovoltages depends strongly on the angle of deposition and on the thickness of the films and is directly proportional to the size of the samples. The polarity of the emf depends on the position of the substrate with regard to the molecular beam, with the + sign present on the substrate's far end. Orig. art. has: 2 figures. [ZL]

SUB CODE: 10/ SUBM DATE: 16Jun64/ ORIG REF: 008/ OTH REF: 005/ ATD PRESS: 4237

Card 1/1

EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AR6031887 SOURCE CODE: UR/0058/66/000/006/E095/E095

AUTHOR: Vaytkus, Yu. Yu.; Vishchakas, Yu. K.; Persianov, I. S.; Smilga, A. A.

TITLE: Photoconductivity anisotropy of cadmium selenide single crystals 19

SOURCE: Ref. zh. Fizika, Abs. 6E743

REF SOURCE: Lit. fiz. sb., v. 5, no. 4, 1965, 491-494

TOPIC TAGS: cadmium selenide, cadmium selenide photoconductivity, photoconductivity anisotropy

ABSTRACT: The anisotropy of photoconductivity in CdSe single crystals is investigated. In the (1010) plane the photoconductivity relationship in the direction of axes a and c is 2:1, while in the (0001) plane anisotropy varies periodically as a function of the shape ot the crystal cross-section. [Translation of abstract]

SUB CODE: 20/

Card 1/1 nst

SMILGA, Bol'demar Petrovich; FEDCHENKO,V., red.; MIKHAYLOVSKAYA, N., tekhn. red.

[Obvious? No, not yet explored] Ochevidnoe? Net, eshche neizvedannoe. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1961. 351 p. (MIRA 14:9)

(Relativity)

SMILGA, I.P.

DIKENSHTEYN, G.Kh.; KIREYCHEV, V.D.; SMILGA, I.P.; SHEBUYEVA, I.N.

Tectonics of the Pripet fault. Geol. nefti 1 no.4:7-14 Ap '57. (MLRA 10:8)
(Pripet Valley--Geology, Structural)

SMILGA, J.; LOZA, V.

Third Conference on the Problems of Leptospirosis. Vestis Latv ak no.8:180-182 '60. (EEAI 10:9)

(LEPTOSPIROSIS)

SMILGA, Kh. V.

6
2 May
4E2c (4)

15

Cyclohexanone-formaldehyde resins. A. A. Blagonravova, G. A. Levkovich, and Kh. V. Smilga. *Khim. Prom.* 1953, No. 6, 23-4; *Referat. Zhur., Khim.* 1956, Abstr. No. 27268.—The polycondensation of the cyclohexanone and HCHO is carried out in alk. media. Excess of HCHO results in water-sol. and of cyclohexanone-water-insol. resins. The second type, being more acceptable for lacquer formulation, is studied, and the results are given. The condensation of cyclohexanone (98.5% of ketone) and 15% aq. HCHO soln. is carried out at 90–5° with NaOH as catalyst. The effect of the catalyst quantity on the process and the character of formed products, the duration of the process, and the ratio of the reacting components are studied. The synthesized resins are characterized by their m.ps., hydroxyl no., water resistance, and soly. in a mixt. of alc. and butyl acetate. The water resistance of the products sharply increases with the increase of the NaOH. The resins obtained when the min. alkali (2.5%) is used form films which crack easily in time. The resins are removed from the condensation product by extg. with a mixt. of xylene and BuOH, washing, and distg. off the solvents. The cyclohexanone-HCHO resins are transparent, gold-colored products m. 90–100°, sol. in dichloroethane, ketones, turpentine, complex esters, etc., and are compatible with cellulose esters, polyesters, and urea-HCHO resins. Addn. of these resins to lacquers speeds up their drying and gives the coatings hardness, high gloss, and polishing properties. —N. V.

15
11

BAYBAYEVA, S.T.; SMILGA, Kh.V.; TOMILOVA, N.D.

Determining methyl groups and formaldehyde content of phenol- and cresol-formaldehyde resins. Lakokras.mat.i ikh prim. no.2:52-54 '62. (MIRA 15:5)

(Resins, Synthetic—Testing)

USSR/Scientific Organization - Conferences

Card 1/1 Pub. 118 - 5/14

Authors : Sandomirskiy, V. B., and Smilga, V. P.

Title : Conference on electron phenomena in adsorption and catalysis

Periodical : Usp. fiz. nauk 55/1, 111-120, Jan 1955

Abstract : A detailed report is presented on the conferences held between April 16 and 19, 1954 at the Institute of Physical Chemistry of the Academy of Sciences, USSR. The major topics discussed during these meetings were: electron phenomena in catalysis and adsorption, general problems of the theory of catalysis, effect of illumination on the adsorbability of solid bodies, connection between electrical conductivity and catalytic activity, nature of active surfaces, etc. The names of scientists present at these meetings are listed.

Institution : .....

Submitted : .....

.5(4)

AUTHORS: Deryagin, B. V., Corresponding Member, Academy of Sciences, USSR, Smigla, V. P. SOV/2o-121-5-31/5o

TITLE: The Electron Theory of the Adhesion of Metals Connected by a Semiconductor Layer (Elektronnaya teoriya adgezii metallov, soyedinennykh poluprovodnikovoy prosloykoy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 5, pp 877 - 88o (USSR)

ABSTRACT: Hitherto, the double layer and the adhesion forces of a thin semiconducting sheet (which is inclosed between two different metals) have been investigated only qualitatively. The authors use the mathematical analogy of this problem with the problem of the electrostatic interaction of two differently charged surfaces which are separated by a electrolyte layer. This paper deals only with the case in which there are only carriers of one kind in the semiconductor. Only a small part of the impurity centers is assumed to be ionized. In this case, the equilibrium distribution of the

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charges is determined by the equation of Poisson (Puasson) - Boltzmann (Bol'tsman). The adhesion force of the film with respect to any metal is equal to $F = \varepsilon^2 E^2_{boundary}/8\pi$ where $E_{boundary}$ denotes the field strength within the semiconductor on the boundary with the corresponding metal. The problem, therefore, consists of the determination of E on the right and left boundaries of the films. Then boundary conditions for the above mentioned Poisson-Boltzmann equation are given explicitly. This equation together with the boundary conditions is absolutely equivalent to the corresponding problem in the theory of the heterocoagulation of colloids for the interaction through a binary symmetric electrolyte. A certain difference between the 2 analogous metals is then discussed. By a variation of the thickness of the film the adhesion force is changed equally for both of the metals. The mathematical calculations may be carried out as in the papers on the theory of heterocoagulation. The adhesion

of the film increases monotonously if H decreases. The following interesting conclusion may be drawn from the above given considerations: If the thickness of the film (enclosed between 2 different metallic surfaces) is adequately diminished, the density of the double layer (and therefore also the adhesion forces) can always be increased. There are 4 figures and 4 references, all of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry AS USSR)

SUBMITTED: April 8, 1958

The Rôle of the Surface Properties of a Semiconductor in Adhesion Phenomena

of a single type. To be precise, an electron-semiconductor is investigated. The position of the surface levels is shown by a schematical drawing. This scheme corresponds to a negatively charged surface. A second drawing shows the d-zone-scheme for the case in which contact between the semiconductor and the metal is established through a narrow gap. Another case is, however, possible, in which electric field strength has different signs on the two sides of the semiconductor surface. According to the authors' opinion, it is convenient to subdivide all cases of contact between a semiconductor an a metal into two groups: 1) The electric field has the same direction on both sides of the semiconductor surface; 2) It has different directions. Calculations are followed step by step and numerical results are given by a table. Field strength in the gap increases rapidly with an increasing number of centers. At the point of contact fields occur which cause an adhesive force amounting to a two-figure number of kilograms per cm^2. There are 3 figures, 1 table, and 4 references, 3 of which are Soviet.

SMILGA, V. P. and DERYAGIN, B. V.

"The Role of Electrons in the Adhesion Theory."

report presented at the Section on Colloid Chemistry, VIII Mendeleyev Conference of General and Applied Chemistry, Moscow, 16-23 March 1959.
(Koll. Zhur. v. 21, No. 4, pp. 509-511)

S/004/60/000/007/001/003
A104/A029

AUTHORS: Dmitriyev, A.; Smilga, V.; - Physical Scientific Workers

TITLE: On Star-Bound Travel

PERIODICAL: Znaniye-Sila, 1960, No. 7, pp. 30 - 33

TEXT: This article is a dispute on the possibility and technical requirements of astronautics as asserted by A. Dmitriyev and denied by V. Smilga. The former refutes the opinion that distances of many light years will prove an insurmountable obstacle and in referring to the theory of relativity points out the enormous gain of time for passengers of a space ship travelling at a speed close to C (velocity of light). From our point of view time passes slower in such a ship, i.e., the faster the ship the slower the passage of time and a decade on the earth is equivalent to only 1 year in a space ship. Rockets driven by chemical fuel are unsuitable for space travel whereas ionic (electronic), nuclear and photonic rockets deserve consideration. The first type would develop a powerful thrust by projection of electrically charged particles at 150 - 250,000 km/sec, the second type by projection of powerful flows of high-powered nuclear particles. These can be obtained either by splitting of heavy nuclei or

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On Star-Bound Travel

by a synthesis of light nuclei into heavy ones. Finally, photonic rockets would achieve the highest possible speed by development and projection of powerful electromagnetic radiation. Any process resulting in strong electromagnetic radiation can serve this purpose, though most hopes are centered on the reaction of annihilation caused by the contact of electrons and positrons. This reaction ceases the individual existence of these particles which become a part of the electromagnetic Gamma-radiation and produce an energy many times greater than that of most effective atomic processes. Having mastered the production of necessary quantities of positrons and the difficult problem of their storage and transportation man will also learn to use them as the best imaginable type of fuel. The electromagnetic radiation derived by annihilation of electrons and positrons is liberated as Gamma-quanta; by developing a method of collecting them in directed flow-beams the design of a photonic rocket will become reality. The amounts of "fuel" required to accelerate the rocket up to required speeds are shown in Table 1. Contrary to A. Dmitriyev, V. Smilga categorically rejects the possibility of photonic rockets in view of the enormous weight of such a rocket and the even greater weight of necessary fuel. The annihilation process is not considered a solution in view of the impossibility to design a safe container for positrons. The hope that the "flying tube", a direct-flow photonic engine might be

SMILGA, V.P.

On the theory of the heterocoagulation of colloids in solutions of complex electrolytes. Koll. zhur. 22 no. 5:615-624 S-O '60. (MIRA 13:10)

1. Institut fizicheskoy khimii AN SSSR, Moskva.
(Colloids) (Coagulation)

SMILGA, V.P.; CHIZMADZHEV, Yu.A.

Steady states of distributed electrochemical systems and their stability. Dokl.AN SSSR 133 no.3:633-636 Jl '60.
(MIRA 13:7)

1. Institut elektrokhimii Akademii nauk SSSR. Predstavleno akademikom A.N.Frumkinym.
(Electrochemistry)

SMILGA, V. P., Cand. Phys-Math. Sci. (diss) "Electron Theory of Adhesion." Moscow, 1961, 8 pp (Acad. of Sci. USSR, Institute of Electro-chemistry) 200 copies (KL Supp 12-61, 253).

SMILGA, V P

42

PHASE I BOOK EXPLOITATION SOV/5590

Konferentsiya po poverkhnostnym silam. Moscow, 1960.

Issledovaniya v oblasti poverkhnostnykh sil; sbornik dokladov na konferentsii po poverkhnostnym silam, aprel' 1960 g. (Studies in the Field of Surface Forces; Collection of Reports of the Conference on Surface Forces, Held in April 1960) Moscow, Izd-vo AN SSSR, 1961. 231 p. Errata printed on the inside of back cover. 2500 copies printed.

Sponsoring Agency: Institut fizicheskoy khimii Akademii nauk SSSR.

Resp. Ed.: B. V. Deryagin, Corresponding Member, Academy of Sciences USSR; Editorial Board: N. N. Zakhavayeva, N. A. Krotova, M. M. Kusakov, S. V. Nerpin, P. S. Prokhorov, M. V. Talayev and G. I. Fuks; Ed. of Publishing House: A. L. Bankvitser; Tech. Ed.: Yu. V. Rylina.

PURPOSE: This book is intended for physical chemists.

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Studies in the Field of Surface Forces (Cont.) SOV/5590

31898
S/643/61/000/000/003/007
E039/E485

54400

AUTHOR: Smilga, V.P.

TITLE: Double layer on the boundary of solid bodies dependent on donor-acceptor coupling

SOURCE: Konferentsiya po poverkhnostnym.silam. Moscow, 1960 Issledovaniya v oblasti poverkhnostnykn sil; sbornik dokladov na konferentsii, Moscow, Izd-vo AN SSSR, 1961. At head of title: Akademiya nauk SSSR. Institut fizicheskoy khimii. 76-82

TEXT: The theory of double electric layers arising on contact of solid bodies has been investigated previously for solid bodies of periodic structure, while little interest has been displayed in amorphous bodies. As the extrapolation of results obtained for metals and semiconductors is not satisfactory this investigation on the formation of double electric layers on contacting amorphous bodies was undertaken. It is assumed that the surface layer of one body is saturated by donors and the other by acceptor molecules. An energy diagram of donor and acceptor levels is shown in Fig.1, where d_1 and d_2 are the distances of donors and acceptors from the boundary division and $w_0(d_1, d_2, \varepsilon_1, \varepsilon_2)$

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Double layer on the boundary ...

equation that the process of forming double layers is self-regulating. There is a transfer of electrons from donor to acceptor levels, with an absorption of energy ($w_o < 0$), i.e. the reaction is endothermic; the endothermic nature grows with the formation of the double layer and equilibrium is achieved more quickly (at small values of n) than if the energy absorbed by the reaction remains unchanged. If $w_o > 0$ the reaction is at first exothermic and equilibrium is achieved when $e\beta Vn$ exceeds w_o. The analysis is continued by putting

$$\gamma = 4\pi e^2 \beta \left(\frac{d_1}{\varepsilon_1} + \frac{d_2}{\varepsilon_2} \right)$$

in Eq.(A), hence (11a)

$$\frac{n}{N_d} = \frac{1}{1+e^{-\frac{w_o - \gamma n}{kT}}}$$

Examining n as a function of temperature T, we can see that when $\gamma n < w_o$, n falls with increasing value of T, but when $\gamma n > w_o$, n grows monotonically with T. The solution of

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25322 S/020/61/138/005/022/025
B101/B231

5.4400

AUTHOR: Smilga, V. P.

TITLE: The double layer caused by donor-acceptor bond at the interface of amorphous bodies

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 5, 1961, 1147-1150

TEXT: The author studies the formation of an electric double layer as a result of contact between polymers or amorphous bodies, with the surface of the one body being saturated with donor and that of the other one with acceptor molecules, the concentration per cm^2 amounting to N_d, N_a, respectively, W_0 denoting the difference between the energetic levels of the electron in the donor and acceptor center, d_1 and d_2 the distance of donors and acceptors from the interface. Due to the fact that the reaction spreads simultaneously over the entire surface, each donor-acceptor pair is placed in an electrostatic field created by other pairs which have entered into reaction. The following is put down for the difference of

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the magnitude order of n can be estimated as ranging from 10^{11} to 10^{13}, i.e., the charge density of the double layer corresponds to 10^2-10^4 CGSE. The following is substituted into Eq. (6): $\gamma = 4\pi e^2\beta(d_1/\varepsilon_1 + d_2/\varepsilon_2)$ which results in $n/N_d = 1/\langle 1 + \exp\{-[W_o - \gamma n]/kT\}\rangle$ (7). The graphic solution of this equation is shown in Fig. 2. The result obtained shows that under otherwise unchanged conditions the exothermic reaction can be transformed to an endothermic one by increasing the initial concentration of the donor centers. Analogous processes might be of importance for the chemisorption as well as at the interface solid body - electrolyte. The author mentions N. A. Krotova and L. P. Morozova and thanks B. V. Deryagin for his interest shown in the matter. There are 2 figures and 4 Soviet-bloc references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences USSR)

PRESENTED: February 8, 1961, by A. N. Frumkin, Academician

DERYAGIN, B.V.; SMILGA, V.P.

Effect of the electromagnetic delay of molecular attraction on the coagulation concentrations of electrolytes. Dokl. AN SSSR 153 no.2:377-378 N '63. (MIRA 16:12)

1. Institut fizicheskoy khimii AN SSSR. 2. Chlen-korrespondent AN SSSR (for Deryagin).

DERYAGIN, B.V.; SMILGA, V.P.

Effect of electromagnetic lag on the coagulating concentrations of electrolytes. Koll. zhur. 26 no.5:589-591 S-O '64. (MIRA 17:10)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

MARTYNOV, G.A.; SMILGA, V.P.

Interaction between colloidal particles having dipole molecules adsorbed on their surface. Koll. zhur. 27 no.2:250-253 Mr-Ap '65. (MIRA 18:6)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

[illegible], [illegible]

"Certain data on the potential sources of leptospirosis in the [illegible] [illegible]." p. 1 6.

Desyatoye soveshchaniye po parazitologicheskim problemam i prirodnoochagovym boleznyam. 22-29 Oktyabrya 19[illegible] g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 19[illegible]), Moscow-Leningrad, 1[illegible], Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

Inst. of Microbiology, AS Latvian SSR/Riga

SMILGA, Ya. [Smilga, J.] (Riga); LOZHA, V. [Loza, V.] (Riga)

Hemolytic test for the diagnosis of leptospirosis. In Russian.
Vestis Latv ak no.4:159-162 '60. (EEAI 10:7)

1. Akademiya nauk Latviyskoy SSR, Institut mikrobiologii.
(HEMOLYSIS AND NEMOLYSINS) (LEPTOSPIROSIS)

~~SMILGEL'SKIY, O~~

SMIGEL'SKIY, O.

6757* (Russian.) On the Problem of Activity Coefficients for Binary Mixtures of Non-Electrolytes. K voprosu o koeffitsientakh aktivnosti dlia binarnykh smesei neelektrolitov. E. Rukenshtein and O. Smilgel'skii. *Doklady Akademii Nauk SSSR*, v. 111, Dec. 21, 1956, p. 1282-1285.

An attempt to derive a more satisfactory mathematical equation for studying mixtures of methylethylacetone N heptane.

3 2

Chem

KONDRAT'YEV, Afanasiy Borisovich, kand.tekhn.nauk; YERSHOVA, Galina Nikolayevna, inzh.; MEN'SHIKOV, Ivan Alekseyevich, prof., doktor tekhn.nauk; MOSKOVSKIY, Mikhail Ivanovich, kand.tekhn.nauk; SOBOLEV, David Iosifovich, kand.tekhn.nauk; SMIL'GEVICH, Petr Kazimirovich, inzh.; SHIROKOV, Boris Ivanovich, kand.sel'skokhoz.nauk; Prinimali uchastiye: TREBIN, Boris Nikolayevich, inzh.; OSOBOV, Vadim Izrailevich, inzh. BRIK, P.A., prepodavatel', retsenzent; IVANOV, V.A., prepodavatel', retsenzent; KOGANOV, A., prepodavatel', retsenzent; KONONOV, B.V., prepodavatel', retsenzent; MARKOV, G.Ya., prepodavatel', retsenzent; OSIPOV, G.P., prepodavatel', retsenzent; RYABOV, P.I., prepodavatel', retsenzent; SOLOV'YEV, K.Ya., prepodavatel', retsenzent; SOROKIN, V.Ya., prepodavatel', retsenzent; BANNIKOV, P., red.; VORONKOVA, Ye., tekhn.red.

[Manual for collective farm machinery operators] Spravochnik mekhanizatora sel'skogo khoziaistva. Penza. Penzenskoe knizhnoe izd-vo, 1959. 610 p. (MIRA 14:2)

1. Saratovskiy institut mekhanizatsii sel'skogo khozyaystve imeni M.I.Kalinina (for Brik, Ivanov, Koganov, Kononov, Markov, Osipov, Ryabov, Solov'yev, Sorokin).
(Agricultural machinery) (Farm mechanization)

SMILIIANOV, G., Prof.; BOIANOV, B., prof.; NIKOLOV, B.; KRAIOVSKI, St.; AVRAMOV, D.; BENDERLIEV, M.; KHRISTOZOV, T.; GESHEVA, N.; RUSKOV, R.; LIKOV, Ch.

Considerations of the social position of edentulous in Bulgaria. Stomatologiia, Sofia No.1:41-49 1955.

1. Iz katedrata po ortopedichna stomatologiia pri Visshiia med. institut V. Chervenkov --Sofiia, Zav. katedrata: prof. G. Smiliianov.

(TEETH,
edentulous, soc. aspects in Bulgaria)

Smiljaković, Jovan J.

Influence of fertilizing and the depth of plowing upon the yields of maize. Jovan J. Smiljaković (Univ. Belgrade, Zemun, Yugoslavia). *Zemljište i Biljka* 2, 145–56(1953).—Maize was planted after the seed beds were plowed to depths of 20 and 25 cm., and fertilized with (1) nothing; (2) various amts. of manure (I); (3) various amts. of both I and N-K-P fertilizers; (4) various amts. of N-K-P fertilizers. The maize planted in the soil plowed to a 25-cm. depth always showed better results (11–27.7% more). I showed good results, and higher amts. of I gave better results, and I + N-K-P also gave good results. N-K-P alone had hardly any effect. Werner Jacobson

~~JERIC, SMILJAN~~
SMILJAN JERIC

CZECHOSLOVAKIA/Electronics - Electron and Ion Emission H-2

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 13574

Author : Jeric Smiljan
Inst : Not Given
Title : Secondary Electron Emission

Orig Pub : Obz. mat. in fiz., 1956-1957, 5, No 3, 117-126

Abstract : Popular survey on secondary emission and its applications.

Card : 1/1

BUTIGAN, N.; SMILJANIC, B.; STANCIC-ROKOTOV, F.

Potentiated local anesthesia and its role in modern surgery. Acta chir. Iugosl. 8 no.3:232-239 '61.

1. Kirurski odjel Opce bolnice "Dr. M.Stojanovic" u Zagrebu (Predstojnik dr. D.Riessner).
(ANESTHESIA LOCAL) (HIBERNATION ARTIFICIAL)

RIESSNER, D.; SMILJANIC, B.

Repeated mitral commissurotomy through the right thoracic approach. Acta chir. Iugosl. 10 no.1:24-29 '63.

1. Kirurski odjel Opce bolnice "Dr M. Stojanovic" u Zagrebu (Predstojnik dr D. Riessner).
(MITRAL STENOSIS) (HEART SURGERY)

S

SMILJANIC, B.; BELANCIC, I.; SIPUS, N.

Neurinoma of the stomach. Acta chir. Iugosl. 11 no.1:59-68 O '64.

1. Kirurski odjel (v.d. Sefa dr N. Popov) Zavod za radiologiju (Predstojnik prof. dr. S. Kadrnka) i Odjel za patologiju (Sef pri, dr M. Knezevic) Opce bolnice Dr M. Stojanovic u Zagrebu.

SMILJANIC, Dusan

Destructive action of the house fungus. Publ Teh fak Sarajevo 2 no.2:5-12 '59.

SMILJANIC, D.

Flat roofs. Publ Teh fak Sarajevo 3 no. 1:5-24 '60.

ACC NR: AP6025837 SOURCE CODE: YU/0020/65/000/004/0017/0021

AUTHOR: Brezinscak, Marijan--Brezinshchak, Mariyan (Graduate engineer; Director); Smiljanic, Danijel--Smilyanich, Daniyel (Graduate engineer) 66 B

ORG: Plant for Development of Elements for Nuclear Equipment, Institute "Rade Koncar" of Electrotechnology, Zagreb (Zavod za razvoj opreme za nuklearna postrojenja Elektrotehnickog instituta poduzeca "Rade Koncar")

TITLE: Development of electromagnets for nuclear research 19

SOURCE: Nuklearna energija, no. 4, 1965, 17-21

TOPIC TAGS: nuclear research, electromagnet, particle beam, charged particle

ABSTRACT: Electromagnets developed for use in nuclear research are described. Quadrupole magnets were designed to produce magnetic fields for the focusing of beams of charged elementary particles. The excitation coils of almost all the magnets developed consist of flat coils separately insulated and impregnated. Both solid steel and laminated steel cores are used. Orig. art. has: 16 figures. [NA]

SUB CODE: 09, 18, 20 / SUBM DATE: none

Card 1/1 UDC

0916 0968

SMILJANIC, Dusan, inz. arh., redovni profesor za predmet "Arhitektonske konstrukcije" (Kalemova 4, Sarajevo)

Protection of buildings against underground water and humidity. Publ Teh fak Sarajevo 4 no. 2:37-59 '61.

1. Faculty of Architecture and Urban Planning, University of Sarajevo.

SMILJANIC, Gabro, ing. (Zagreb, Srebrnjak 166)

Device for the automatic recording of the characteristics of Geiger-Muller counters. Elektr vest 27 no.11/12 N-D '59. (EEAI 10:1)
(Geiger-Muller counters) (Radioactivity)

SMILJANIC, M

SMILJANIC, M.

Smiljanic, M.; Rikovski, I.; Pusin, N.

"Refractive Index of Some Organic Compounds at Various Temperatures And Its Temperature Coefficient." II p. 271 (GLASNIK,

Vol. 18, No. 5, 1953, Beograd.).

Pusin, N.

Rikovski, I.

SO: Monthly List of East European Accessions, Vol. 3, No. 3, Library of Congress, March 1954, Uncl.

GRITSAYENKO,V.Ya.; SMILKO,M.K.

Removal of structural defects in stoppers and pouring heads made by the plastic molding method. Ogneupory 20 no.3:137-139 '55. (MLRA 8:8)

1. Kondrat'yevskiy ogneupornyy zavod "Krasnaya zvezda"
(Refractory materials)

SMILKO, M.K.; FER, M.P.

Rapid complexometric method of determining the content of Fe_2O_3 and $Al_2O_3 \div TiO_2$ in refractory materials. Ogneupory 30 no.5:47 '65. (MIRA 18:5)

1. Kondrat'yevskiy shamotnyy zavod "Krasnaya Zvezda".

SMILKSTYN, A.O.

Using data of aeroradiometric surveying in searching for nonradioactive minerals and for purposes of geological mapping. Trudy SNIIGGIMS no.25: 72-80 '62. (MIRA 16:4)
(Siberia—Aeronautics in surveying) (Siberia—Geology—Maps)

SMILKSTYN, A.O.; TUPITSIN, Ye.M.

New data on phosphate-bearing Devonian sediments in the Gornyy Altai. Min. syr'ye no.10:55-60 '64. (MIRA 18:3)

SMILKSTYN, A.O.

Some geochemical characteristics of Middle Devonian acid effusives in the Gornyy Altai. Trudy SNIIGGIMS no.35:42-47 '64. (MIRA 18:5)

[illegible], J.

How to rationalise unloading of trucks.

P. 27 (PADOMJU LATVIJAS KOLCHOZNIEKS) Riga, Latvia Vol. 9, No. 6, June 1957

SO: Monthly Index of East European Acessions (AMEI) Vol. 6, No. 11 November 1957.

[illegible], J.

Simple equipment for production of clay bricks.

I. 26 (PADOMJU LATIJAS KOLCHOZNIEKS) Riga, Latvia Vol. 9, No. 7, July 1957

SO: Monthly Index of East European Acessions (AMEI) Vol. 6, No. 11 November 1957.

SMILKTINS, J.

Simple equipment for preparing and transportation of concrete mixtures.

p. 18 (Padomju Latvijas Kolchoznieks) Vol. 9, No. 8, Aug. 1957, Riga, Lativa

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

USSR/Human and Animal Physiology - Respiration. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 12848

Author : Grabenko, I.K., Smiller, R.R.

Inst : Rostov na Don Medical Institute

Title : Question of Oxygen-Carrying Capacity of the Blood in Disturbance of the Acid-Base Balance

Orig Pub : Tr. Otchtn. nauchn. konferentsii (Rostovsk. n/D. med. in-t) za 1956 g. Rostov-na-Donu, 1957, 317-320

Abstract : In 30 patients with cardiac insufficiency, diabetes, and diseases of the kidney, the state of acidosis led to a depression of the oxygen-carrying capacity of the blood and a decrease in the O_2 saturation of arterial and venous blood. There was a compensatory elevation in the coefficient of O_2 utilization by the tissues in subclinical acidosis; in cases of pronounced acidosis,

Card 1/2

USSR/Human and Animal Physiology - Respiration. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 12848

when the compensatory possibilities of the tissues were exhausted, along with a significant decrease in the oxygen-carrying capacity of the blood the coefficient of O_2 utilization was decreased.

Card 2/2

SMILER, M.R.

Results of the work of the traumatological center in Yuzhno-Sakhalinsk. Vop. travm. i ortop. no.13:37-39 '63.
(MIRA 18:2)

1. Zaveduyushchiy gorodskim travmatologicheskim punktom Yuzhno-Sakhalinska.

BARAYANTS, A.A.; SMILLER, M.R.; KOLESNIK, M.K.; BALYUK, O.N.; SINADSKIY, N.Ye., kand.med.nauk; GLUZMAN, Yu.D.; RUDENKO, G.D., kand.med.nauk; AKIMOVA, Ye.A., promyshlennyy vrach; SIDENKO, K.I.

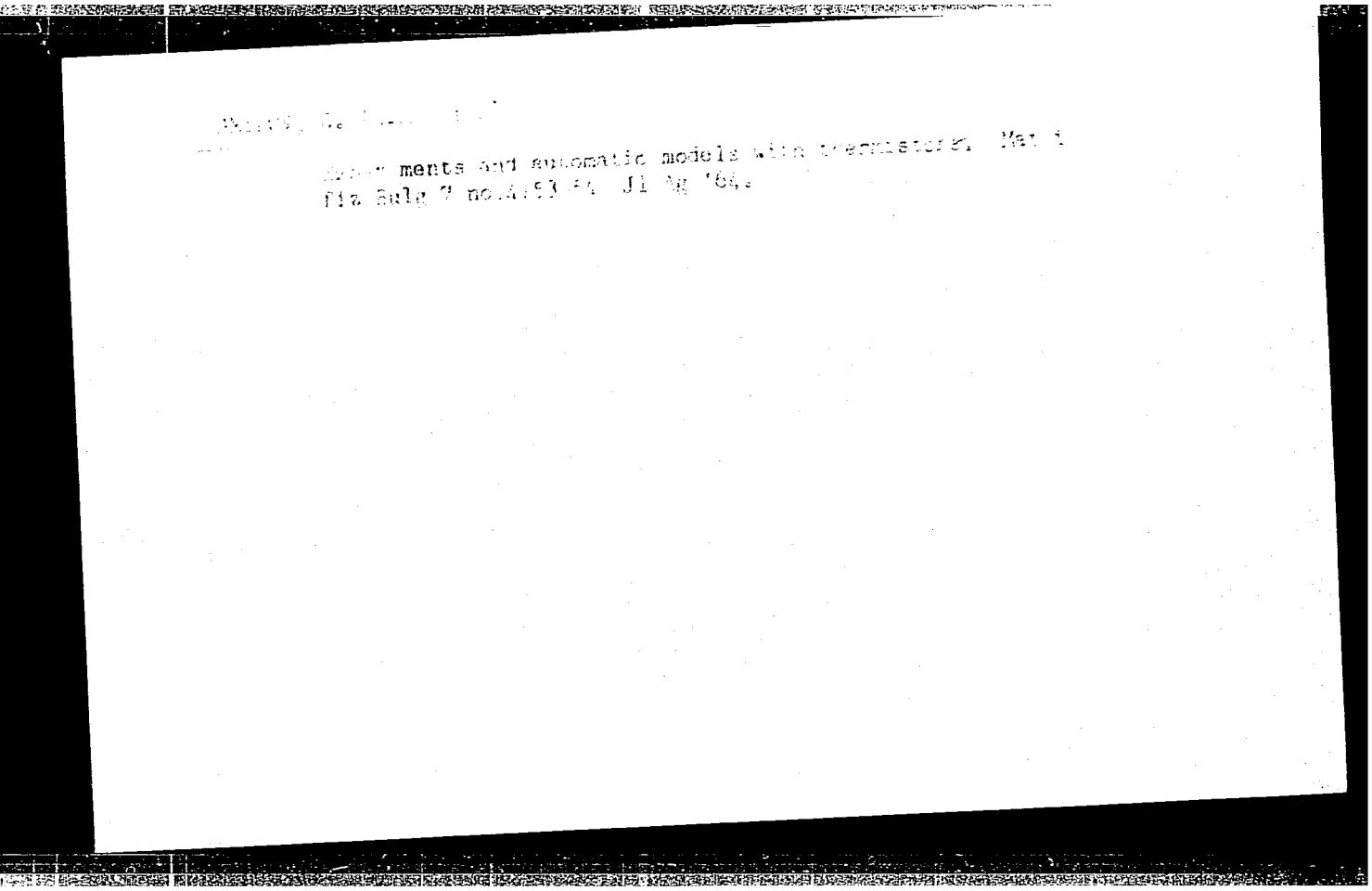
Discussions. Vop. travm. i ortop. no.13:47-60 '63. (MIRA 18:2)

1. Glavnyy vrach lechebnogo ob"yedineniya shakhty "Dolinskaya", kombinata "Sakhalinugol'" (for Barayants). 2. Zaveduyushchiy Yuzhno-Sakhalinskim gorodskim travm[illegible]logicheskim punktom (for Smiller). 3. Kholmskoye upravleniye stroitel'noye upravleniye Sakhalinshakhtostroya (for Kolesnik). 4. Doverennyy vrach Dorozhnogo komiteta professional'nogo soyuza rabochikh zheleznodorozhnogo transporta (for Balyuk). 5. Irkutskiy gosudarstvennyy nauchno-issledovatel'skiy institut travmatologii i ortopedii (for Sinadskiy). 6. Starshiy inspektor Gosudarstvennoy avtomobil'noy inspekcii (for Gluzman). 7. Leningradskiy nauchno-issledovatel'skiy institut travmatologii i ortopedii (for Rudenko). 8. Glavnyy vrach meditsinskogo ob"yedineniya goroda Shakhterska, Sakhalinskaya oblast' (for Sidenko).

SMILLER, R.R.

17-Ketosteroid content in the urine of patients with cancer of the breast. Vop. onk. 11 no.10:39-43 '65. (MIRA 18:10)

1. Iz Nauchno-issledovatel'skogo instituta rentgenologii, radiologii i onkologii Ministerstva zdravookhraneniya RSFSR, Rostov-na-Donu (direktor - A.K.Pankov; rukovoditel' - prof. V.V.Nikol'skiy).



ments and automatic models with thermistors. Mar 1
fla Subj 7 no.4:53-54 Jl Ag '64.

SHILOVICH, D. A., Cand Tech Sci -- (diss) "Investigation and basis of the form and parameters of working parts of drills for subsurface and broadcast seeding of grain crops," Minsk, 1960, 15 pp (Belorussian Sci-Res Institute of Soil Science, Academy of Agricultural Sciences BSSR) (KL, 33-60, 145)

SHILOVICH, A.

"A new method of dyein with Kuposoli dyes in long dye baths (knit goods)",p. 20, (TEXTILE, Vol. 2, no. 7, July 1951, Bucuresti)

SO: Monthly List of East European Accession, Vol. 2, no. 8, Library of Congress, August 1953, Uncl.

RUMANIA/Virology - Bacterial Viruses (Phages). E-2

Abs Jour : Ref Zhur - Biol., No 15, 1958, 66924

Author : Sechter, I., Bercovici, C., Iosub, C., Smilovici, M., Corbers

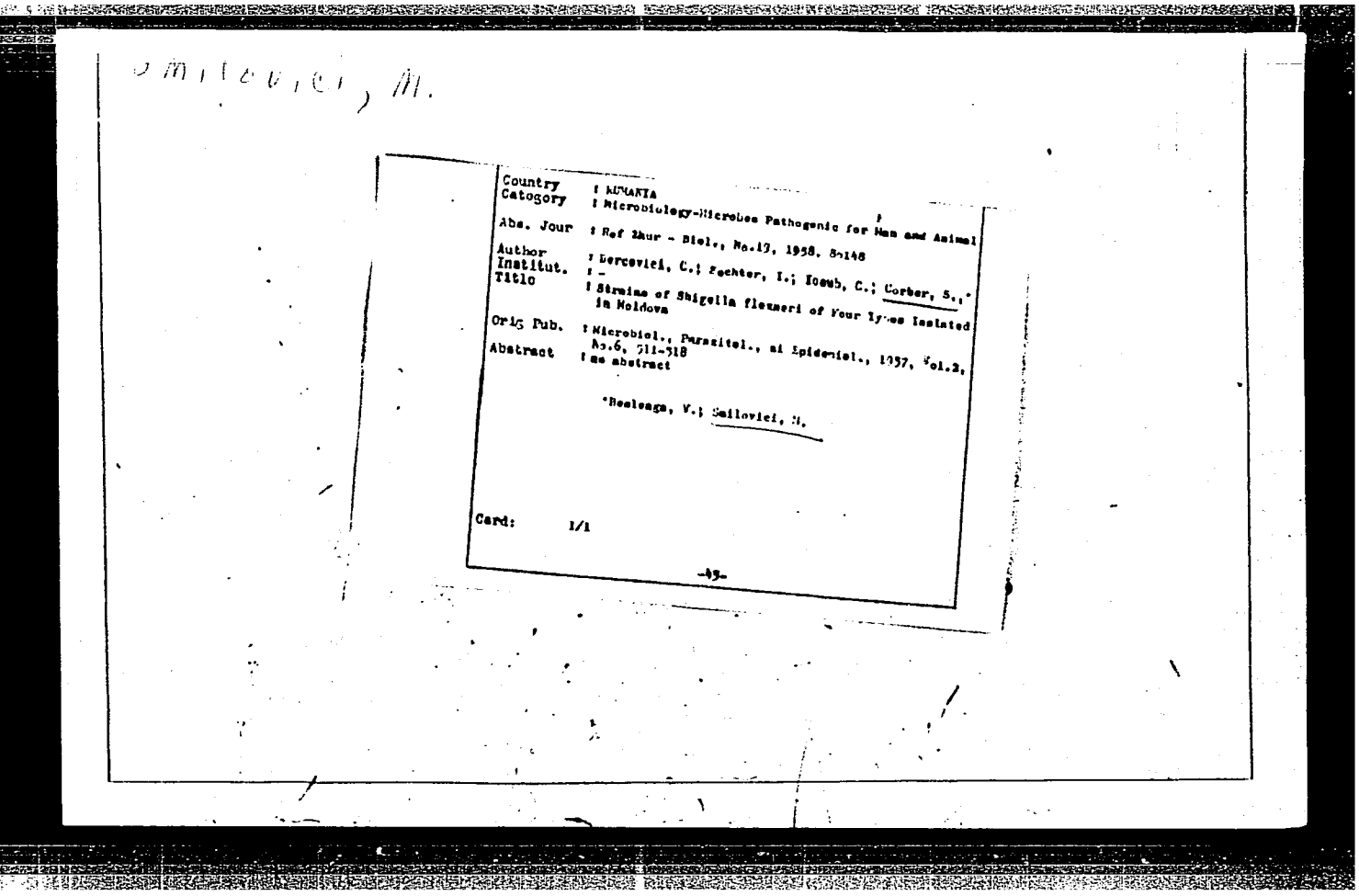
Inst : Academy RPR.

Title : Typing of Typhoid Fever Bacteria of the Unclassified Group of Vi- Strains. Communication I. A Determination of a New Type of Bacteriophage Type of D-Group.

Orig Pub : Studii si cercetari stiint. Acad. RPR Fil Iasi, Med. 1956, 7, No 1, 221-225.

Abstract : No abstract.

Card 1/1



Country : RUMANIA
Category : Microbiology-Microbes Pathogenic for Man and Animal
Abs. Jour : Ref Zhur - Biol., No.17, 1958, 80148
Author : Dercovici, C.; Fechter, I.; Iosub, C.; Corber, S.,
Institut. : -
Title : Strains of Shigella flexneri of Four Types Isolated in Moldova
Orig Pub. : Microbiol., Parazitol., si Epidemiol., 1957, Vol.2, No.6, 511-518
Abstract : No abstract

*Beaieaga, V.; Ciuilovici, M.

Card: 1/1

-43-

SMILOVICI, M.

Device for the rectification of spindle caps. p. 4

TEHNICA NOUA, Bucuresti, Vol 3, No. 35, Feb., 1956

SOk East European Accessions List(EEAL) Library of Congress, Vol 5, No. 7, July, 1956

SMILOVICI, M.

Smilovici, M; Chintescu, M. Role of the planner and technologist in increasing labor productivity and reducing production costs. p. 1. TEHNICA NOUA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor) Bucuresti. Vol. 3, no. 41, Mar. 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress, Vol. 5, No. 8, August 1956.

SMILOVICI, M.

Smilovici, M; Chintescu, M. Hydromechanization of work in open lime quarries. p. 1. TEHNICA NOUA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor) Bucuresti. Vol. 3, no. 41, Mar. 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress, Vol. 5, No. 8, August 1956.

SMILOVICI, M.

Smilovici, M; Chintescu, M. Simplification of the drive-control device on oscillating platforms and on barriers of underground ramps. p. 2. TEHNICA NOUA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor) Bucuresti. Vol. 3, no. 41, Mar. 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress, Vol. 5, No. 8, August 1956.

CASETTI, M. dr.; DASCALU, Maria, dr.; OSTAP, B. dr.; SMILOVICI, S., dr.; PREDA, L. chim.; DUMITRIU, I., dr.; MUNTEANU, Elena, dr.

Clinical value of the quantitative study of bile sediment collected at intervals of a minute. Med. intern.(Bucur.) 16 no.7:819-826 Jl'64.

1. Lucrare efectuata in Clinica a IV-a medicala, Iasi (director: conf. N.Goldenberg).

SUDZHAYEV, G.A.; SMILOVITSKAYA, G.I.

Experience in an inoculation detachment. Zdrav. Belor. 5 no.3:27-29 Mr '59. (MIRA 12:7)

1. Sanepidstantsiya Stalinskogo rayona g. Minska.
(DIPHTHERIA)

SUDZILOVSKIY, G.A.; SHILOVITSKAYA, G.I.

Status of immunity to diphtheria in children in the Stalin District of Minsk. Zdrav.Belor. 5 no.7:43-44 Jl '59.
(MIRA 12:9)

1. Sanepidstantsiya Stalinskogo rayona gor.Minska.
(MINSK--DIPHTHERIA--PREVENTIVE INOCULATION)

SUDZHAYEV, G.A.; SMILOVITSKAYA, G.I.

Epidemiology of diphtheia. Zdrav. Belor. 6 no.6:34-35 Je '60.
(MIRA 13:8)

1. Sanepidstantsiya Stalinskogo rayona goroda Minska.
(MINSK—DIPHTHERIA)

SUDZHAYEV, G.A.; SMILOVITSKAYA, G.I.

Restoration of immunity to diphtheria lost after infectious diseases; author's abstract. Zhur.mikrobiol.epid.i immun. 32 no.1:140-141 Ja '61. (MIRA 14:6)

1. Iz Sanitarno-epidemiologicheskoy stantsii Stalinskogo rayona Minska.

(DIPHTHERIA)

SUDZHAYEV, G.A.; SMILOVITSKAYA, G.I.

Restoration of immunity to diphtheria lost flooving infectious diseases. Vop.okh.mat.i det. 7 no.4:34-37 Ap '62. (MIRA 15:11)

1. Iz rayonnoy sanitarno-epidemiologicheskoy stantsii Minska.
(COMMUNICABLE DISEASES)
(DIPHTHERIA—PREVENTIVE INOCULATION)

GLEBOV, Fedor Vasil'yevich; SMILOVITSKIY, L., red.; NOVIKOVA, V., tekhn. red.

[Headquarters of workers' initiative; from the work practice of regular production conferences] Shtab rabochei initsiativy; iz opyta raboty postoianno deistvuiushchikh proizvodstvennykh soveshchanii. Minsk, Gos.izd-vo BSSR Red. massovo-polit. lit-ry, 1961. 28 p. (MIRA 15:1)

1. Predsedatel' Minskogo oblastnogo Soveta profsoyuzov (for Glebov).

(Minsk Province--Works councils)

SMILOWSKI, S.; OBDRZALEK, O.

"Automatic heat control in stack furnaces in Trinec Ironwork of the Great October Socialist Revolution."

HUTNIK. Praha, Czechoslovakia. Vol. 9, no. 4, Apr. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Uncles

SMILYANETS, L. YE.

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1593

Author : L. Ye. Smilyanets
Inst : Not Given
Title : Watering System for Tomatoes on the Upper Terrace Soils of the Dnestr River

Orig Pub : Tr. Mold. ovoshche-kartof. orosit. opyt. st., Kishinev, Gosizdat Moldavii, 1956, 93-109

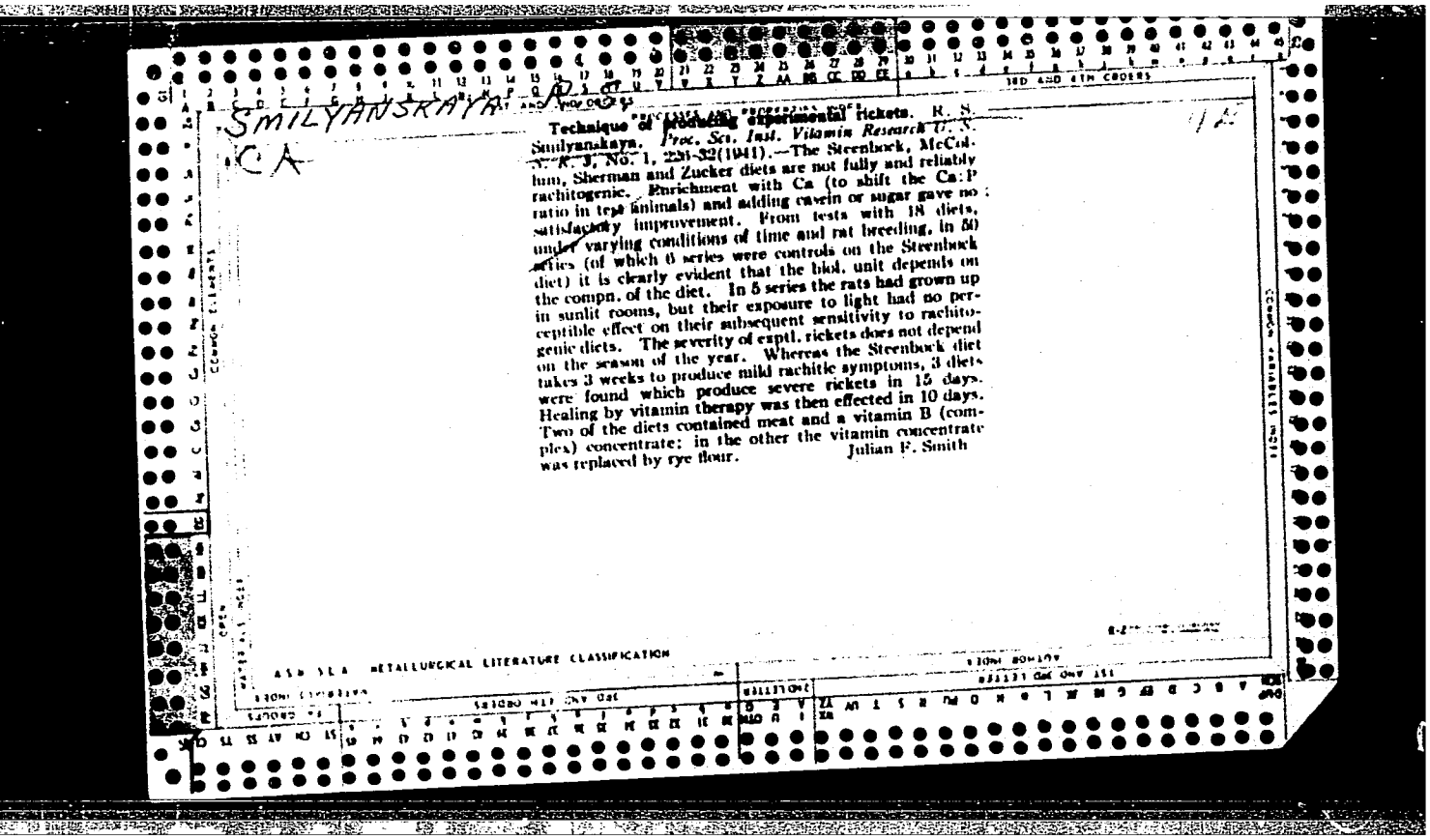
Abstract : Experiments at the Moldavia Vegetable Potato Station have established that increased soil moisture at the beginning of vegetation helps to form the surface root system which renders the plants less resistant to drought. The lack of moisture at the beginning of plant vegetation develops a strong root system directed deep into the soil. The greatest increase of yield amounted to 396 centners per hectare with the following correlation to the number of irrigations: 2 - before fruitbearing and 8 - during the period of fruitbearing. For cultivating tomatoes on the Southern black soils of upper terraces of Dnester, it is recommended that there be 7 to 8 irrigations

Card : 1/2

GATAULLIN, M.F., red.; PETROV, K., red.; LEBEDEV, Ye.A., red.; RUMYANTSEV, V.P., red.; SMILYANSKAYA, I.M., red.; KOZLOVSKAYA, G.M., red.; BERESLAVSKAYA, L.Sh., tekhn. red.

[Modern Lebanon; a handbook]Sovremennyi Livan; spravochnik. Moskva, Izd-vo vostochnoi lit-ry, 1963. 222 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut narodov Azii.
(Lebanon--Guidebooks)



SMILYANSKAYA

CA

Technique of producing experimental rickets. R. S. Smilyanskaya. *Proc. Sci. Inst. Vitamin Research U. S. S. R.* 3, No. 1, 231-52(1941).—The Steenbock, McCollum, Sherman and Zucker diets are not fully and reliably rachitogenic. Enrichment with Ca (to shift the Ca:P ratio in test animals) and adding casein or sugar gave no satisfactory improvement. From tests with 18 diets, under varying conditions of time and rat breeding, in 50 series (of which 6 series were controls on the Steenbock diet) it is clearly evident that the biol. unit depends on the compn. of the diet. In 5 series the rats had grown up in sunlit rooms, but their exposure to light had no perceptible effect on their subsequent sensitivity to rachitogenic diets. The severity of exptl. rickets does not depend on the season of the year. Whereas the Steenbock diet takes 3 weeks to produce mild rachitic symptoms, 3 diets were found which produce severe rickets in 15 days. Healing by vitamin therapy was then effected in 10 days. Two of the diets contained meat and a vitamin B (complex) concentrate; in the other the vitamin concentrate was replaced by rye flour. Julian F. Smith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Smilyanskaya, R. S.

USSR

Diets producing A-avitaminosis, R. S. Smilyanskaya and K. Z. Tul'chinskaya. *Trudy Vitamin. Inst.* 4, 152-3(1963).—A diet [illegible] proved most suitable and consisted of sugar 30%, wheat flour 25, lard 10, dried yeast 10, oat groats 20, and salt 1 mixt. 4. B. S. Levine

SMILYANSKIY, G.L.

Compensation of the nonlinearity of the ohmic resistance of wires using a method which involves stretching of the wires. Izv. vys. ucheb. zav.; radiotekh. 4 no. 2:207-209 Mr-Ap '61. (MIRA 14:5)

1. Rekomendovana kafedroy radiopriyemnykh ustroystv Kiyevskogo ordena Lenina politekhnicheskogo instituta.
(Electric wire) (Electronic apparatus and appliances)

SMILYANSKIY, V. I.

Smilyanskiy, V. I. -- "Investigation of Certain Mechanical Action Automatic Control Devices." Min Higher Education USSR, L'vov Polytechnic Inst., L'vov, 1955 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

3-58-6-24/34

AUTHOR: Smilyanskiy, V.I. Candidate of Technical Sciences

TITLE: An Autcmat for Assembling a Manometer Needle Unit (Avtomat dlya sborki uzla strelki manometra)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 6, page 83 (USSR)

ABSTRACT: Under the supervision of Professor A.N. Rabinovich, the Chair for Technology of Machine Construction, Machine Tools and Instruments of the L'vov Polytechnical Institute has designed and manufactured an experimental model of an automatic device for assembling manometer needles. The needle (0.3 mm thick) has a hole 3 mm in diameter into which a brass plug with a conic central opening must be placed. The edges of the plug must then be pressed so that the plug and the needle, when assembled, are absolutely immovable in respect to each other, while the plug's central opening should not be distorted. The device is started by a three-phase motor of 0.08 kw capacity and a worm reducer. It can process 1,000 to 1,200 pieces per hour. There is one photo.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnical Institute)

Card 1/1

S/112/59/000/015/047/068
A052/A002

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 15, p. 172, # 32169

AUTHOR: Smilyanskiy, V.I.

TITLE: An Investigation of Dynamic Errors of Inspection on an Automatic Device With a Curvilinear, V-shaped Gauge (Checking of Cylindrical Parts)

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-t, 1958, No. 45, pp. 218-243

TEXT: Bibliographic entry.

Card 1/1

SOV/123-59-16-64783

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 16, p 159 (USSR)

AUTHOR: Smilyanskiy, V.I.

TITLE: On the Problem of Determining the Calculated (Planned) Accuracy of Automatic Control Devices.

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-t, 1958, vyp. 45, 283 - 288

ABSTRACT: A calculation method of determining the accuracy of automatic control devices is suggested, which is based on the criterion of the "negligible error"well-known in metrology. It is stated that in assessing the errors according to the Gauss law the calculated limit errors of the method of measurement must be negligibly small in comparison with the tolerance margin of the machine parts and should amount to 0.44δ, where δ is half of the tolerance margin. The main error components of the method (errors of the automatic control device, of reference gages and temperature errors) as well as the errors of the automatic control device itself (errors of the pick-up, errors resulting from the measuring stress and adjustment errors) are analyzed. When designing the automatic device, errors of the control method can be considered as resulting only from

Card 1/2

S/112/59/000/015/048/068
A052/A002

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 15, p. 172, # 32170

AUTHOR: Smilyansky, V.I.

TITLE: The Recurrence Rate of Inspections[14] on Automatic Inspection Devices[14]

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-t, 1958, No. 45, pp. 289-297

TEXT: Bibliographic entry.

Card 1/1

RABINOVICH, Avramm Nakhimovich; BESPALOV, Konstantin Ivanovich; ZLATOGURSKIY, Raymond Raymondovich; LUZINOV, Aleksey Nikolayevich; SMILYANSKIY, Vitaliy Ivanovich; GREBEN', Yu.I., inzh., red. vyp.; FURER, P.Ya., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Automatic checking in the manufacture of machines and instruments] Avtomatizatsiia kontrolia v mashinostroenii i priborostroenii. Moskva, Mashgiz, 1963. 122 p. (MIRA 16:9)

(Machinery industry) (Instrument manufacture) (Automatic control)

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ACCESSION NR: AP5016649 UR/0382/65/000/002/0023/0030
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AUTHOR: Moiseyev, S. S.; Smilyanskiy, V. R.

TITLE: Problem of wave transformation in magnetohydrodynamics

SOURCE: Magnitnaya gidrodinamika, no. 2, 1965, 23-30

TOPIC TAGS: MHD shock wave, plasma wave propagation

ABSTRACT: Treating the plasma in a magnetohydrodynamic approximation, the problem of transformation of waves is investigated. First, the methods are required approximations for various wave transformation problems are briefly reviewed. The problem is formulated in the magnetohydrodynamic equations with appropriate boundary conditions. Various forms of solutions are employed and dispersion relations obtained. Two problems, with magnetic fields, one parallel and one perpendicular to the density variations, are discussed. It is shown that in the second case energy transfer can occur between modes. Results are compared with published methods. "We thank R. Z. Sagdeyev and V. L. Pokrovskiy for their helpful discussion." Orig. art. has: 32 formulas, 2 figures.

ASSOCIATION: none

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